



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address of COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,285	08/08/2001	Gerard Jay Bellasalma	60137-027	6035

26096 7590 07/30/2003

CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

HEITBRINK, TIMOTHY W

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/924,285

Applicant(s)

BELLASALMA ET AL.

Examiner

Tim Heitbrink

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The disclosure is objected to because of the following informalities: "actuator 40" (paragraph 25, line 2) or "end portion 40" (paragraph 26, lines 1,3,4. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-9, 12,14-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nennecker.

Nennecker discloses a valve assembly comprising a port at the end of fluid flow passageway 36 to a mold assembly 22, a coupler having a piston 18,21 said coupler receiving a mix head 11, said fluid flow passageway 36 located from said coupler to said port, said piston 18, 21 movable within said fluid flow passage along a first axis between a first position which allows flow from said coupler to said port and a second position which seals said port. Said fluid flow passage 36 includes a first flow passage contains a port 25 along said first axis, a third flow passage below said port and along said first axis and a second flow passage substantially perpendicular to said first axis, wherein said second passage includes a first second passage portion within said coupler head and a second, second passage portion within the mix head. The second flow passage including a second piston 15 circular in cross section.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nennecker.

While the piston 18,21 is not square in cross-section, such a change in shape would have been in light of In re Dailey et al, 149 USPQ 47 where in change in shape not effecting the operation of the device is considered within the skill of the ordinary artisan.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-10, 12,14-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Gumery et al.

Gumery et al. disclose a valve assembly comprising a port 7 to a mold assembly, a coupler 26 for receipt of a mix head 17, a fluid flow passage from said coupler to said port and a rectilinear piston 38 movable within said fluid flow passage along a first axis between a first position which allows flow from said coupler to said port and a second position which seals said port. The fluid flow passage includes a first flow passage along said first axis and a second flow passage substantially perpendicular to said first axis. The second passage includes a first second passage portion within said coupler head and a second, second passage portion within said mix head. A second piston 32

movable within said second flow passage. A third flow passage 23,24 communicating with said second flow passage in a perpendicular relationship and the second piston movable between a first position which allows flow from said third flow passage to said second flow passage and a second position which prevents fluid flow from said third flow passage to said second flow passage.

Claims 2,13,27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gumery et al.

While the piston 38 is not square in cross-section, such a change in shape would have been in light of In re Dailey et al, 149 USPQ 47 where in change in shape not effecting the operation of the device is considered within the skill of the ordinary artisan.

Angling the piston away from the mix head axis would have also been obvious in light of In re Dailey, 149 USPQ 47 for reasons given supra.

Claims 11, 22, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nennecker as applied to claims 1-9, 12-20 above, and further in view of Schneider.

While Nennecker does not disclose a lock assembly (interlocking surfaces) within the coupler to engage the mix head with the coupler, Schneider discloses a lock assembly within a coupler 10 so as to secure a mix head 20 therein.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a lock assembly in the coupler of Nennecker in order to secure the mix head therein as suggested by Schneider.

Claims 11, 22-26, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gumery et al. as applied to claims 1-10, 12-21 above, and further in view of Schneider.

While Gumery et al. does not disclose a lock assembly (interlocking surfaces) within the coupler to engage the mix head with the coupler, Schneider discloses a lock assembly within a coupler 10 so as to secure a mix head 20 therein.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a lock assembly in the coupler of Gumery et al. in order to secure the mix head therein as suggested by Schneider.

Applicant's arguments filed 5-13-03 have been fully considered but they are not persuasive. Applicant argues Nennecker does not disclose a piston that is rectilinear in cross-section. The Examiner disagrees. The piston is rectilinear in a cross-section when taken along a longitudinal axis. Applicant further argues the square-cross section of the piston as found in paragraph 25 offers advantages not found in the prior art. However, absent any comparative data, such advantages are not considered obvious as the applicant may allege, i.e., both pistons are sized to fit within the space in which they are confined.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

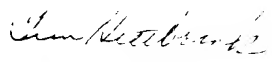
Art Unit: 1722

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Heitbrink whose telephone number is 703-308-3789. The examiner can normally be reached on Tuesday-Friday 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Tim Heitbrink  
Primary Examiner  
Art Unit 1722

7-23-03

twh  
July 23, 2003